

What is claimed is:

1. An analysis support apparatus for performing
an analysis using geometric data to check
5 characteristics of a structure represented by the
geometric data, comprising:
a specifying unit specifying one or more types
of analyses from among plural types of analyses;
an obtaining unit obtaining necessary
10 conditions from among necessary analytical
conditions of the plurality of analyses based on
the specified types of analyses; and
a generating unit generating analytical data
formed by at least the obtained analytical
15 conditions and the geometric data corresponding to
the specified types of analyses.
2. The apparatus according to claim 1, wherein
said analytical data is generated using the
20 obtained analytical conditions as header
information about the geometric data.
3. The apparatus according to claim 1, wherein
said analytical conditions are extracted by
25 selecting a type of a property of a structure

indicated by the geometric data and a corresponding property value.

4. The apparatus according to claim 1, wherein
5 said analytical conditions include an upper
limit of a mesh size when a mesh is generated to
obtain analytical data.

5. The apparatus according to claim 1, wherein
10 said analytical conditions include a contact
setting of a part boundary.

6. The apparatus according to claim 1, wherein
said analytical conditions include a plurality
15 of dimension values or property values provided for
selection of an optimum value.

7. The apparatus according to claim 1, wherein
said analytical conditions include settings of
20 a shell representation of parts geometric data and
of parts weights.

8. The apparatus according to claim 1, wherein
said analytical conditions include a
25 wavelength of an electromagnetic field in an

electromagnetic analysis.

9. An analysis supporting method for performing
an analysis using geometric data to check
5 characteristics of a structure represented by the
geometric data, comprising:

a specifying step of specifying one or more
types of analyses from among plural types of
analyses;

10 an obtaining step of obtaining necessary
conditions from among necessary analytical
conditions of the plurality of analyses based on
the specified types of analyses; and

a generating step of generating analytical
15 data formed by at least the obtained analytical
conditions and the geometric data corresponding to
the specified types of analyses.

10. The method according to claim 9, wherein
20 said analytical data is generated using the
obtained analytical conditions as header
information about the geometric data.

11. The method according to claim 9, wherein
25 said analytical conditions are extracted by

selecting a type of a property of a structure indicated by the geometric data and a corresponding property value.

5 12. The method according to claim 9, wherein
 said analytical conditions include an upper
 limit of a mesh size when a mesh is generated to
 obtain analytical data.

10 13. The method according to claim 9, wherein
 said analytical conditions include a contact
 setting of a part boundary.

 14. The method according to claim 9, wherein
15 said analytical conditions include a plurality
 of dimension values or property values provided for
 selection of an optimum value.

 15. The method according to claim 9, wherein
20 said analytical conditions include settings of
 a shell representation of parts geometric data and
 of parts weights.

 16. The method according to claim 9, wherein
25 said analytical conditions include a

wavelength of an electromagnetic field in an electromagnetic analysis.

17. An analysis supporting program for directing
5 an information processing device to realize an analysis supporting method for performing an analysis using geometric data to check characteristics of a structure represented by the geometric data, comprising:

10 a specifying step of specifying one or more types of analyses from among plural types of analyses;

an obtaining step of obtaining necessary conditions from among necessary analytical
15 conditions of the plurality of analyses based on the specified types of analyses; and

a generating step of generating analytical data formed by at least the obtained analytical conditions and the geometric data corresponding to
20 the specified types of analyses.

18. The program according to claim 17, wherein
said analytical data is generated using the obtained analytical conditions as header
25 information about the geometric data.

19. The program according to claim 17, wherein
said analytical conditions are extracted by
selecting a type of a property of a structure
5 indicated by the geometric data and a corresponding
property value.

20. The program according to claim 17, wherein
said analytical conditions include an upper
10 limit of a mesh size when a mesh is generated to
obtain analytical data.

21. The program according to claim 17, wherein
said analytical conditions include a contact
15 setting of a part boundary.

22. The program according to claim 17, wherein
said analytical conditions include a plurality
of dimension values or property values provided for
20 selection of an optimum value.

23. The program according to claim 17, wherein
said analytical conditions include settings of
a shell representation of parts geometric data and
25 of parts weights.

24. The program according to claim 17, wherein
said analytical conditions include a
wavelength of an electromagnetic field in an
5 electromagnetic analysis.

25. The apparatus according to claim 1, wherein
said generating unit further generates the
analytical data formed by the specified types of
10 analyses.

26. The method according to claim 9, wherein
said generating step further generates the
analytical data formed by the specified types of
15 analyses.

27. The program according to claim 17, wherein
said generating step further generates the
analytical data formed by the specified types of
20 analyses.

28. The apparatus according to claim 1, wherein
said obtaining unit obtains a property value
which is a necessary analytical condition in the
25 specified analysis from a material database.

29. The method according to claim 9, wherein
said obtaining step obtains a property value
which is a necessary analytical condition in the
5 specified analysis from a material database.

30. The program according to claim 17, wherein
said obtaining step obtains a property value
which is a necessary analytical condition in the
10 specified analysis from a material database.